

AMENDMENTS TO THE CLAIMS

1-29. (Cancelled)

30. (Currently Amended) A method for treating Alzheimer's disease, comprising administering an adeno-associated virus vector in a therapeutically effective amount to a subject ~~whereby to suppress a formation of an amyloid plaque in a central nervous system and reduce a~~ the concentration of TGF- β in the blood of the subject ~~is reduced~~, wherein the adeno-associated virus vector comprises DNA encoding a β -amyloid peptide and DNA encoding a signal peptide capable of extracellularly secreting said β -amyloid peptide, in an operative form.

31. (Previously Presented) The method according to claim 30, wherein the β -amyloid peptide is expressed in intestinal cells by the adeno-associated virus vector.

32. (Previously Presented) The method according to claim 30, wherein said β -amyloid peptide comprises the amino acids 4 to 10 of the amino acid sequence as shown in SEQ ID NO: 2.

33. (Previously Presented) The method according to claim 30, wherein the DNA encoding said β -amyloid peptide comprises the nucleotides 10 to 30 of the nucleotide sequence as shown in SEQ ID NO: 1.

34. (Withdrawn) The method according to claim 30, wherein said β -amyloid peptide comprises the amino acid sequence as shown in SEQ ID NO: 2.

35. (Withdrawn) The method according to claim 30, wherein the DNA encoding said β -amyloid peptide comprises the nucleotide sequence as shown in SEQ ID NO: 1.

36. (Withdrawn) The method according to claim 30, wherein said β -amyloid peptide comprises the amino acid sequence as shown in SEQ ID NO: 4.

37. **(Withdrawn)** The method according to claim 30, wherein the DNA encoding said β -amyloid peptide comprises the nucleotide sequence as shown in SEQ ID NO: 3.
38. **(Previously Presented)** The method according to claim 30, wherein said signal peptide is a signal peptide of amyloid precursor protein.
39. **(Withdrawn)** The method according to claim 30, wherein said signal peptide comprises the amino acid sequence as shown in SEQ ID NO: 6.
40. **(Withdrawn)** The method according to claim 30, wherein the DNA encoding said signal peptide comprises the nucleotide sequence as shown in SEQ ID NO: 5.
41. **(Currently Amended)** The method according to claims 30, wherein said administering is ~~orally administering~~.
42. **(New)** The method according to claim 30, wherein progress of cerebrovascular amyloid deposition or microvascular degeneration is suppressed.
43. **(New)** The method according to claim 30, wherein anti- β amyloid peptide antibody production is induced without substantially inducing a cellular immune response.
44. **(New)** The method according to claim 43, wherein the induced cellular immune response causes encephalitis.
45. **(New)** The method according to claim 30, wherein administering said adeno-associated virus vector maintains therapeutic activity for at least 6 months.